

Sinks and Jackson also appear dismissive of the recommendation of screening women for lead body burden via blood lead levels. We stress that this would be only for those women that were exposed in the past or are currently exposed to lead. We would certainly extend any screening to women employed in lead-exposed jobs as they cite. However, the overwhelmingly vast majority of women (and their partners and infants) at risk are those exposed during house renovations involving leaded paint, from dust from ceiling and wall cavities, from "take-home" dust from their jobs, from hobbies, etc.; this can affect all socioeconomic levels. In fact, the most disturbing aspect of lead poisoning from do-it-yourself activities is that most of these people are unaware of the dangers.

No action level was given in our paper because there are no accepted guidelines for blood lead levels and breast-feeding apart from the Lawrence document (2) noted by Sinks and Jackson, the relevance of which has been questioned by Mushak in his letter. In the absence of guidelines, we recommend

that if the mother-to-be is concerned that she may have been heavily exposed to lead from any source at any time, she request a blood lead measurement either before conception or at least during the first trimester. If the blood lead level is greater than two times the CDC "level of concern" (i.e., $>20 \mu\text{g/dl}$), we recommend that she have her breast milk tested by a reputable laboratory.

In addition, we suggest that mothers-to-be maintain healthy diets and consume the NIH recommended daily intake of calcium of 1,100–1,200 mg Ca/day during pregnancy and up to 1,400 mg Ca/day during breast-feeding (3). This will not only potentially lessen the mobilization of endogenous lead from the maternal skeleton as shown in our recent studies (4,5) but also lessen the uptake of exogenous lead from the gastrointestinal tract.

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REFERENCES AND NOTES

1. Gulson BL, Jameson CW, Mahaffey KR, Mizon KJ, Patison N, Law AJ, Korsch MJ, Salter MA. Relationships of lead in breast milk to lead in blood, urine, and diet of the infant and mother. *Environ Health Perspect* 106:667–674 (1998).
2. Lawrence RA. A Review of the Medical Benefits and Contraindications to Breastfeeding in the United States. *Maternal and Child Health Technical Information Bulletin*. Arlington, VA:National Center for Education in Maternal and Child Health, Health Resources and Services Administration, 1997.
3. NIH Consensus Conference. Optimal calcium intake. NIH Consensus Development Panel on Optimal Calcium Intake. *JAMA* 272:1942–1948 (1992).
4. Gulson BL, Jameson CW, Mahaffey KR, Mizon KJ, Korsch MJ, Vimpani G. Pregnancy increases mobilization of lead from maternal skeleton. *J Lab Clin Med* 130:51–62 (1997).
5. Gulson BL, Mahaffey KR, Jameson CW, Mizon KJ, Korsch MJ, Cameron MA, Eisman JA. Mobilization of lead from the skeleton during the postnatal period is larger than during pregnancy. *J Lab Clin Med* 131:324–329 (1998).

Corrections and Clarifications

In the article by Loewenherz et al. (Biological Monitoring of Organophosphorus Pesticide Exposure among Children of Agricultural Workers in Central Washington State) published in *EHP* [105:1344–1353 (1997)], two errors were discovered in the Appendix. The units, as they appear in the Appendix Tables 1, 2, and 3 are incorrect; the correct units are milligrams per gram creatinine. Also, several numbers in Table A.2 were not adjusted for creatinine. The corrected table appears below.

Table A. 2. Creatinine-adjusted dimethylthiophosphate (DMTP) levels (mg/g creatinine) in applicator and reference children for each separate visit^a

| | Applicator children | | Reference children | |
|------------------------------------|---------------------|-----------|--------------------|----------|
| | Visit 1 | Visit 2 | Visit 1 | Visit 2 |
| All children | | | | |
| Mean ^b | 0.076 | 0.118 | 0.046 | 0.040 |
| Median | 0.016 | 0.045 | 0.000 | 0.000 |
| CV ^c | 211% | 232% | 267% | 150% |
| Range | ND–0.768 | ND–2.006 | ND–0.493 | ND–0.190 |
| Frequency ^d | 23 (38) | 35 (58) | 3 (19) | 6 (38) |
| Number | 61 | 60 | 16 | 16 |
| Focus children (one per household) | | | | |
| Mean | 0.096 | 0.094 | 0.054 | 0.026 |
| Median | 0.035 | 0.045* | 0.000 | 0.000* |
| CV | 188% | 134% | 254% | 146% |
| Range | ND–0.768 | ND–0.518 | ND–0.493 | ND–0.113 |
| Frequency | 21 (46) | 24 (56)** | 3 (23) | 4 (33)** |
| Number | 46 | 43 | 13 | 12 |

Abbreviations: CV, coefficient of variation; ND, not detectable.

^aTests for statistical significance applied to focus children data only (see Methods).

^bMean and other univariate statistics were calculated by estimating trace samples as 1/2 limit of detection.

^cCV = standard deviation/mean $\times 100$.

^dPercent is shown in parentheses.

*Significant difference across applicator and reference children: $p = 0.038$ (Mann-Whitney U test).

**Marginally significant difference across groups: $p = 0.064$ (chi-square test).